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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,618	09/20/2005	Masahiro Sasagawa	1806.1009	8148
21171	7590	06/22/2007	EXAMINER	
STAAS & HALSEY LLP			CHANG, VICTOR S	
SUITE 700				
1201 NEW YORK AVENUE, N.W.			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20005			1771	
			MAIL DATE	DELIVERY MODE
			06/22/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/549,618

Applicant(s)

SASAGAWA ET AL.

Examiner

Victor S. Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 5,6 and 9-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,7,8 and 12-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicants' election without traverse of an unhydrogenated copolymer represented by formula (6), i.e., H-S-H, in claim 6 in the reply filed on 4/19/2007 is acknowledged. Additionally, applicants are reminded of the previous election without traverse of Species A1 (copolymer black S) in Category A (composition of unhydrogenated copolymer); Species B1 (hydrogenated copolymer bonded to a first-order modifier) in Category B (composition of polymer foam); "a first-order modifier having an amino group" in Category C (Functional group of modifiers); and a "hydrogenation product of a block copolymer comprised of a homopolymer block of vinyl aromatic monomer units and at least one polymer block selected from the group consisting of a homopolymer block of conjugated diene monomer units and a copolymer block comprised of vinyl aromatic monomer units and conjugated diene monomer units" in category D (Composition of component (B)) in the replies filed on 11/13/2006 and 2/9/2007. In summary, species commonly elected are identified in claims 1-4, 7, 8 and 12-15. It should be noted that previously elected species in Category D is not readable on claim 11. Further, in view of elected Species A1, formula (6) of claim 6 is not commonly elected. Claims 5, 6, 9, 10 and 11 are withdrawn.

### ***Claim Objections***

2. Claim 12 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the

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claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

More particularly, claim 12 appears to be is improperly dependent upon claim 11, because none of the Markush group member of claim 12 is found to be further limiting species of any of Markush group member in claim 11. Claim 12 is treated as being dependent upon claims 1 or 2 in the present Office action.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2 and 5 of copending Application No. 10/513,926. Although the conflicting claims are not identical, they are not patentably distinct from each other because they obviously read on each other as claimed. In particular, the copending claims a

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foam having a composition readable on claim 1 of instant invention, and the peak loss tangent and foam density are deemed to be obvious routine optimization, motivated by the desire to obtain a workable cushioning property. As to the optional limitation, since it is not required, it has not been given patentable weight.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 7 and 8 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility.

More particularly, throughout the specification, nowhere has the examiner found a disclosure relating to the utility of the functional group of the modifier.

### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-4 and 13-15 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Karande et al. [WO 02/068529 A2].

Karande's invention relates to an article prepared from a blend comprising 0 to 50 w% of hydrogenated random styrene butadiene copolymer [page 3]. Foamed articles are used for various cushions and footwear including shoe soles, etc. [page 11].

For claims 1 and 14, regarding component (A), Karande is silent about the weight ratio between the styrene and butadiene, the peak loss tangent and foam specific gravity of the foam. However, since Karande teaches generally the same subject matter for the same use, workable aforementioned characteristics are deemed to be either anticipated by Karande, or obviously provided by practicing the invention of prior art. As to the component (B), since it is optional, it is not a required limitation by the prior, and therefore it has not been given a patentable weight.

For claim 2, Karande discloses that the blend comprising from 30 to 95 w% of propylene copolymer, such as ethylene propylene copolymer to improve impact resistance [pages 3 and 8], which is inherently rubbery and reads in component (B) as claimed.

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For claim 3, the absence of a crystallization peak to hydrogenated random styrene butadiene copolymer is deemed to be an inherent material property of the same random copolymer composition as claimed.

For claim 4, the examiner takes Official notice that the monomer distribution along the backbone of a random copolymer is inherently taper distributed due to the inherent difference in the monomer reactivity, as evidenced by Karande's description of the term "substantially random" [pages 4-5].

For claim 13, Karande discloses that ethylene propylene copolymer is used for impact improvement. Workable impact resilience is deemed to be either anticipated, or an obvious routine optimization to one skilled in the art, dictated by the same end use (e.g., cushions, shoe soles, etc.) as the instant invention.

For claim 15, Karande discloses that the foamed articles are used for various cushions (shock absorber).

10. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Karande et al. [WO 02/068529 A2].

The teachings of Karande are again relied upon as set forth above.

For claim 12, Karande discloses that the blend may include styrenic block copolymers, such as styrene-butadiene-styrene (SBS), etc., in an amount up to 50 w% [pages 3 and 9]. The examiner takes Official notice that hydrogenation of SBS improves the aging resistance, and it would have been obvious to one skilled in the art to modify the SBS of Karande with hydrogenation, motivated by the desire to improve the durability of the foamed article.

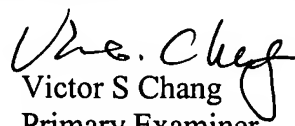
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***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S. Chang whose telephone number is 571-272-1474. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Victor S Chang  
Primary Examiner  
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6/18/2007